

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

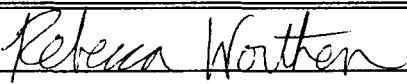

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>UTU-8348</b>
b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator <b>KERR McGEE OIL &amp; GAS ONSHORE LP</b>		7. If Unit or CA Agreement, Name and No. <b>LOVE UNIT UTU-63065X</b>
3A. Address <b>1368 SOUTH 1200 EAST VERNAL, UT 84078</b>		8. Lease Name and Well No. <b>LOVE UNIT 1122-180</b>
3b. Phone No. (include area code) <b>(435) 781-7024</b>		9. API Well No. <b>4304739606</b>
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface <b>SWSE, 660' FSL 1980' FEL 628771X 39.855214</b> At proposed prod. Zone <b>4412562Y -109.494680</b>		10. Field and Pool, or Exploratory <b>LOVE UNIT</b>
14. Distance in miles and direction from nearest town or post office* <b>38.2 mi +/- SE of Ouray, Utah</b>		11. Sec., T., R., M., or Blk. and Survey or Area <b>SEC 18-T11S-R22E, SLB&amp;M</b>
13. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>660'</b>	16. No. of Acres in lease <b>1089.18</b>	12. County or Parish <b>UINTAH</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>REFER TO TOPO C</b>	17. Spacing Unit dedicated to this well <b>40</b>	13. State <b>UTAH</b>
19. Proposed Depth <b>8300'</b>	20. BLM/BIA Bond No. on file <b>BOND NO: WYB000291</b>	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>5811' GL</b>	22. Approximate date work will start*	23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).   |
| 2. A Drilling Plan.  | 5. Operator certification.  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office. | 6. Such other site specific information and/or plans as may be required by the authorized office. |

25. Signature 	Name (Printed/Typed) <b>REBECCA WORTHEN</b>	Date <b>8/20/2007</b>
Title <b>LAND SPECIALIST</b>		
Approved by (Signature) 	Name (Printed/Typed) <b>BRADLEY G. HILL</b>	Date <b>09-11-07</b>
Title <b>ENVIRONMENTAL MANAGER</b>	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

Federal Approval of this  
Action Is Necessary

RECEIVED

SEP 04 2007

DIV. OF OIL, GAS & MINING

T11S, R22E, S.L.B.&M.

Kerr-McGee Oil & Gas Onshore LP

1923 Brass Cap,  
2.0' High, Pile  
of Stones

S89°54'45"E - 2466.58' (Meas.)

S89°49'41"E - 2638.73' (Meas.)

1923 Brass Cap,  
1.5' High

1923 Brass Cap,  
1.9' High, Pile  
of Stones

Lot 1

Lot 2

Lot 3

LOVE UNIT #1122-180

Elev. Ungraded Ground = 5812'

Lot 4

1923 Brass Cap,  
2.0' High, Pile  
of Stones

1923 Brass Cap,  
1.0' High, Pile  
of Stones

R R  
2122  
E E

N89°53'25"W - 2475.12' (Meas.)

Brass Cap

1928 Brass Cap,  
2.6' High, Pile  
of Stones

N89°53'54"W - 2639.64' (Meas.)

1928 Brass Cap,  
1.5' High, Pile  
of Stones

1928 Brass Cap,  
1.8' High, Pile  
of Stones

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

(NAD 83)

LATITUDE = 39°51'18.66" (39.855183)

LONGITUDE = 109°29'43.45" (109.495403)

(NAD 27)

LATITUDE = 39°51'18.78" (39.855217)

LONGITUDE = 109°29'40.99" (109.494719)

LEGEND:

└─┘ = 90° SYMBOL

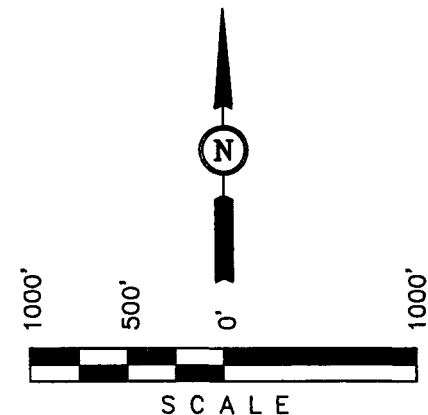
● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

Well location, LOVE UNIT #1122-180, located as shown in the SW 1/4 SE 1/4 of Section 18, T11S, R22E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
ROBERT J. HARRIS  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 05-07-07	DATE DRAWN: 05-10-07
PARTY L.K. J.A. C.H.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE Kerr-McGee Oil & Gas Onshore LP	

**LOVE UNIT 1122-180  
SW/SE, SEC. 18, T11S, R22E  
UINTAH COUNTY, UTAH  
UTU-8348**

**ONSHORE ORDER NO. 1**

***DRILLING PROGRAM***

**1. Estimated Tops of Important Geologic Markers:**

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	912'
Top of Birds Nest Water	1125'
Mahogany	1443'
Wasatch	3830'
Mesaverde	6290'
MVU2	7224'
MVL1	7860'
TD	8300'

**2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Water	Green River	912'
	Top of Birds Nest Water	1125'
	Mahogany	1443'
Gas	Wasatch	3830'
Gas	Mesaverde	6290'
Gas	MVU2	7224'
Gas	MVL1	7860'
Water	N/A	
Other Minerals	N/A	

**3. Pressure Control Equipment (Schematic Attached)**

*Please refer to the attached Drilling Program.*

**4. Proposed Casing & Cementing Program:**

*Please refer to the attached Drilling Program.*

**5. Drilling Fluids Program:**

*Please refer to the attached Drilling Program.*

**6. Evaluation Program:**

*Please refer to the attached Drilling Program.*

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 8300' TD, approximately equals 5146 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3320 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

*Drilling is planned to commence immediately upon approval of this application.*

9. **Variances:**

*Please refer to the attached Drilling Program.*

10. **Other Information:**

*Please refer to the attached Drilling Program.*



# KERR-McGEE OIL & GAS ONSHORE LP **DRILLING PROGRAM**

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP DATE August 17, 2007  
WELL NAME LOVE UNIT 1122-180 TD 8,300' MD/TVD  
FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 5,811' GL KB 5,826'  
SURFACE LOCATION SWSE, SEC. 18-T11S-R22E, 660' FSL 1980' FEL BHL Straight Hole  
Latitude: 39.855183 Longitude: 109.495403  
OBJECTIVE ZONE(S) Wasatch/Mesaverde  
ADDITIONAL INFO Regulatory Agencies: BLM SURF & UDGOM MINERALS, Tri-County Health Dept.

GEOLOGICAL FORMATION			MECHANICAL		
LOGS	TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
			12-1/4"	9-5/8", 32 3#, H-40, STC	Air mist
Catch water sample, if possible, from 0 to 3,830' Green River @ 0,912' Top of Birds Nest Water @ 1,125' Mahogany @ 1,443' Preset f/ GL @ 1,700' MD					
Note: 12.25" surface hole will usually be drilled ±400' below the bottom of lost circulation zone. Drilled depth may be ±200' of the estimated set depth depending on the actual depth of the loss zone.					
Mud logging program TBD Open hole logging program f/ TD - surf csg					
	Wasatch @	3,830'			Water/Fresh Water Mud 8.3-11.0 ppg
	Mverde @	6,290'			
	MVU2 @	7,224'			
	MVL1 @	7,860'			
	TD @	8,300'	7-7/8"	4-1/2", 11 5#, I-80 or equivalent LTC casing	Max anticipated Mud required 11.0 ppg



# **KERR-McGEE OIL & GAS ONSHORE LP** **DRILLING PROGRAM**

## **CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				2270	1370	254000
SURFACE	9-5/8"	0 to 1700	32.30	H-40	STC	7780	1.72	5.28
PRODUCTION	4-1/2"	0 to 8300	11.60	I-80	LTC	2.66	1.34	201000

- 1) Max Anticipated Surf. Press. (MASP) (Surface Casing) = (Pore Pressure at next csg point - (0.22 psi/ft - partial evac gradient x TVD of next csg point))
- 2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft - partial evac gradient x TD)
- (Burst Assumptions: TD = 11.0 ppg) .22 psi/ft = gradient for partially evac wellbore
- (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing \* Buoy. Fact. of water)
- MASP 2922 psi

**Burst SF is low, but csg is much stronger than formation at 2000'. EMW @ 2000' for 2270# is 21.8 ppg or 1.13 psi/ft**

## **CEMENT PROGRAM**

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
Option 1	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
			<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>				
SURFACE	LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite + 25 pps Flocele + 3% salt BWOC	170	35%	11.00	3.82
Option 2	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,330'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	370	60%	11.00	3.38
	TAIL	4,970'	50/50 Poz/G + 10% salt + 2% gel + .1% R-3	1390	60%	14.30	1.31

\*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

\*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

## **FLOAT EQUIPMENT & CENTRALIZERS**

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

## **ADDITIONAL INFORMATION**

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

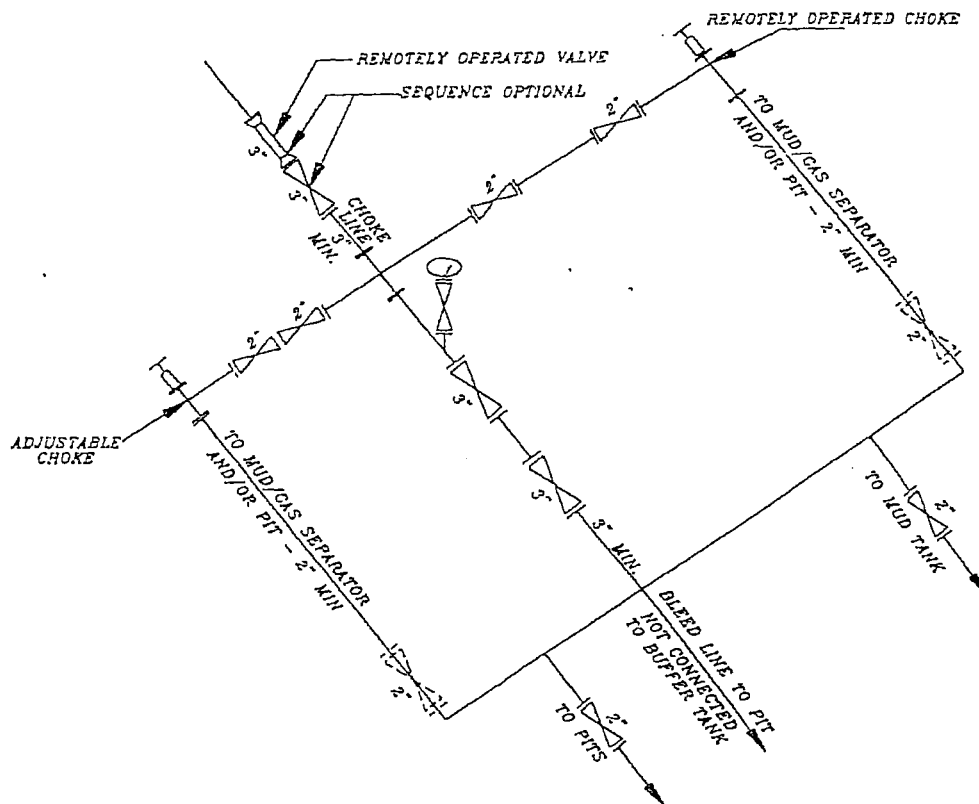
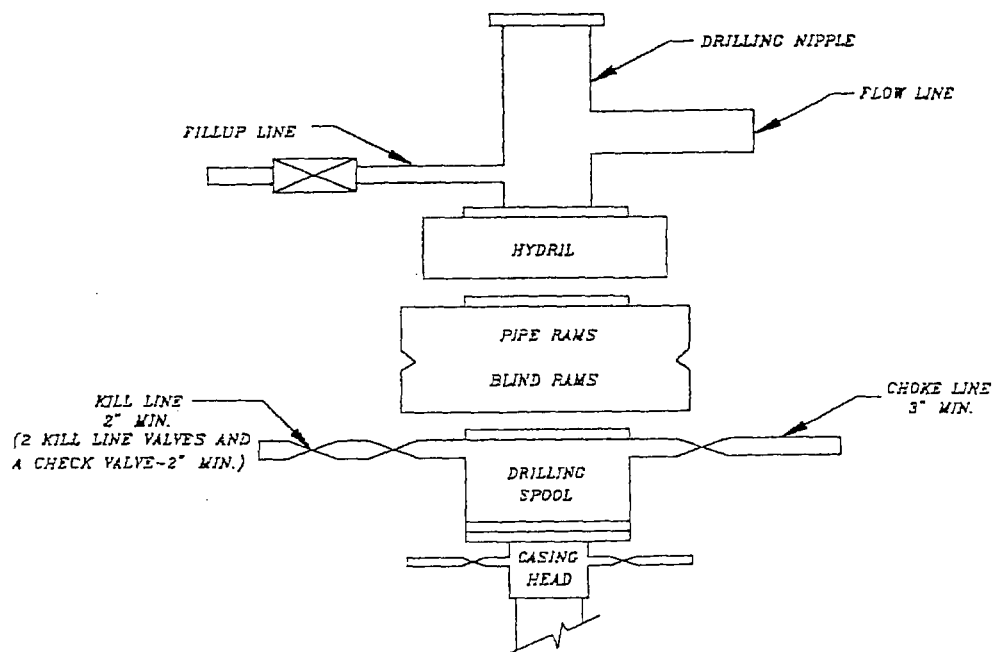
DRILLING ENGINEER: \_\_\_\_\_  
Brad Laney

DATE: \_\_\_\_\_

DRILLING SUPERINTENDENT: \_\_\_\_\_  
Randy Bayne

DATE: \_\_\_\_\_

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM



**LOVE UNIT 1122-180  
SW/SE, SEC. 18, T11S, R22E  
UINTAH COUNTY, UTAH  
UTU-8348**

**ONSHORE ORDER NO. 1**

***MULTI-POINT SURFACE USE & OPERATIONS PLAN***

**1. Existing Roads:**

Directions to the proposed location are attached.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

**2. Planned Access Roads:**

An approximately 0.2 mile +/- access road is proposed. An existing 2-track 0.15 mile +/- road needs to be upgraded. Refer to Topo Map B.

The access road will be crowned (2 to 3%), ditched and constructed with a running surface of 18 feet and a maximum disturbed width of 30 feet. Graveling or capping the roadbed will be performed as necessary to provide a well constructed, safe road. Prior to construction or upgrading, the proposed road shall be cleared of any snow and allowed to dry completely.

Surface disturbance and vehicular traffic will be limited to the proposed location and proposed access route. Any additional area needed will be approved in advance. All construction shall be in conformance with the standards outlined in the BLM and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development. 1989.

The road surface and shoulders will be kept in a safe and usable condition and will be maintained in accordance with the original construction standards. All drainage ditches will be kept clear and free-flowing and will be maintained according to original construction standards. The access road surface will be kept free of trash during operations. All traffic will be confined to the approved disturbed surface. Road drainage crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing or shall the drainages be blocked by the road bed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Should mud holes develop, they shall be filled in and detours around them avoided. When snow is removed from the road during the winter months, the snow shall be pushed outside of the borrow ditches, and the turnouts kept clear so that snowmelt will be channeled away from the road.

**3. Location of Existing Wells Within a 1-Mile Radius:**

Please refer to Topo Map C.

**4. Location of Existing & Proposed Facilities & Pipelines:**

*The following guidelines will apply if the well is productive.*

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon (2.5 Y 6/2) as determined during the on-site inspection.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

**Variances to Best Management Practices (BMP) Requests:**

Approximately 829' +/- of 4" steel pipeline is proposed. Please refer to the Topo Map D. The pipeline will be butt-welded together.

The pipeline shall be installed on surface within access corridor for the well location. As a Best Management Practice (BMP), the pipeline would be buried within the access road corridor if possible. The construction of pipelines requires the corridor of 30 feet.

This exception to the BMP should be granted by the BLM Authorized Officer because indurated bedrock, such as sandstone, is at or within 2 feet of the surface and the soil has a poor history for successful rehabilitation.

**5. Location and Type of Water Supply:**

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec.32, T4S,R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

6. **Source of Construction Materials:**

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

7. **Methods of Handling Waste Materials:**

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner is to be used as discussed during on-site inspection. It will be a minimum of 20 mil thick and felt with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

*Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S, R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E. (Request is in lieu of filing Form 3160-5, after initial production).*

**8. Ancillary Facilities:**

None are anticipated.

**9. Well Site Layout: (See Location Layout Diagram)**

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

**10. Plans for Reclamation of the Surface:***Producing Location:*

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

*Dry Hole/Abandoned Location:*

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

When the pit is backfilled, the topsoil pile shall be spread on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The following seed mixture will be used to reclaim the surface for interim reclamation using appropriate reclamation methods. A total of 12 lbs/acre will be used if the seeds are drilled (24 lbs/acre if the seeds are broadcast). The per acre requirements for drilled seeds are:

Black Sagebrush	12 lbs.
Galleta Grass	10 lbs.

The operator shall call BLM for the seed mixture when final reclamation occurs.

**11. Surface Ownership:**

United States of America  
Bureau of Land Management  
170 South 500 East  
Vernal, UT 84078  
(435) 781-4400

**13. Other Information:**

A Class III Archaeological Survey Report No. 06-669, completed on January 9, 2007 for the well location; also, the Paelontological Reconnaissance Report No. 07-111 completed on August 8, 2007 are being submitted along with the Application for Permit to Drill for the well location.

**WILDLIFE STIPULATIONS:**

**SAGE GROUSE:** No Construction or Drilling March 15<sup>th</sup> – June 15<sup>th</sup>.

**ANTELOPE:** No Construction or Drilling May 15<sup>th</sup>—June 20<sup>th</sup>.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of

Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance. The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

**13. Lessee's or Operators's Representative & Certification:**

Rebecca Worthen  
Land Specialist  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078  
(435) 781-7013

Randy Bayne  
Drilling Manager  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078  
(435)781-7018

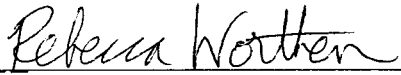
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Westport Oil & Gas Company agrees to be responsible under the terms and the conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for the lease activities is being provided by BLM Nationwide Bond #WYB000291.

I hereby certify that the proposed drill site and access route has been inspected and that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

  
\_\_\_\_\_  
Rebecca Worthen

August 20, 2007  
\_\_\_\_\_  
Date

**Kerr-McGee Oil & Gas Onshore LP**  
**LOVE UNIT #1122-180**  
**SECTION 18, T11S, R22E, S.L.B.&M.**

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 10.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 5.6 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #1122-19C TO THE SOUTH; FOLLOW ROAD FLAGS IN A SOUTHERLY DIRECTION APPROXIMATELY 0.1 MILES TO AN EXISTING TWO-TRACK ROAD TO THE SOUTH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.15 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #1122-19B TO THE EAST; FOLLOW ROAD FLAGS IN AN EASTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 59.05 MILES.

# Kerr-McGee Oil & Gas Onshore LP

LOVE UNIT #1122-180

LOCATED IN UINTAH COUNTY, UTAH

SECTION 18, T11S, R22E, S.L.B.&M.

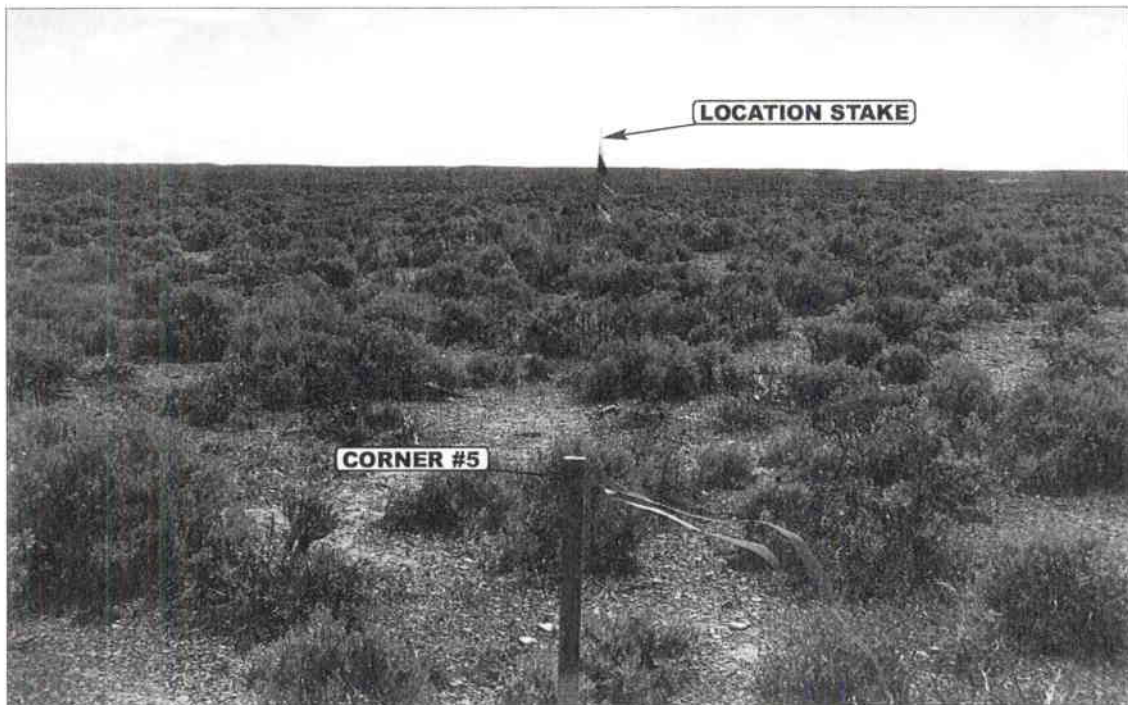


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY

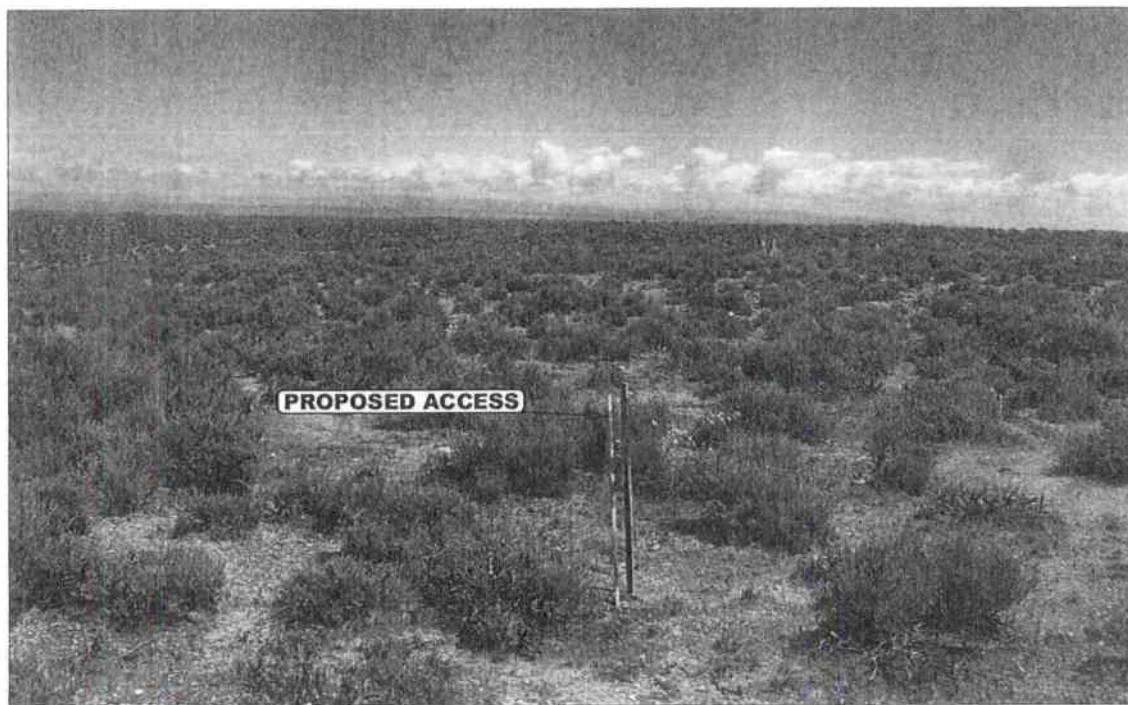


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHEASTERLY



- Since 1964 -

**UELS** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

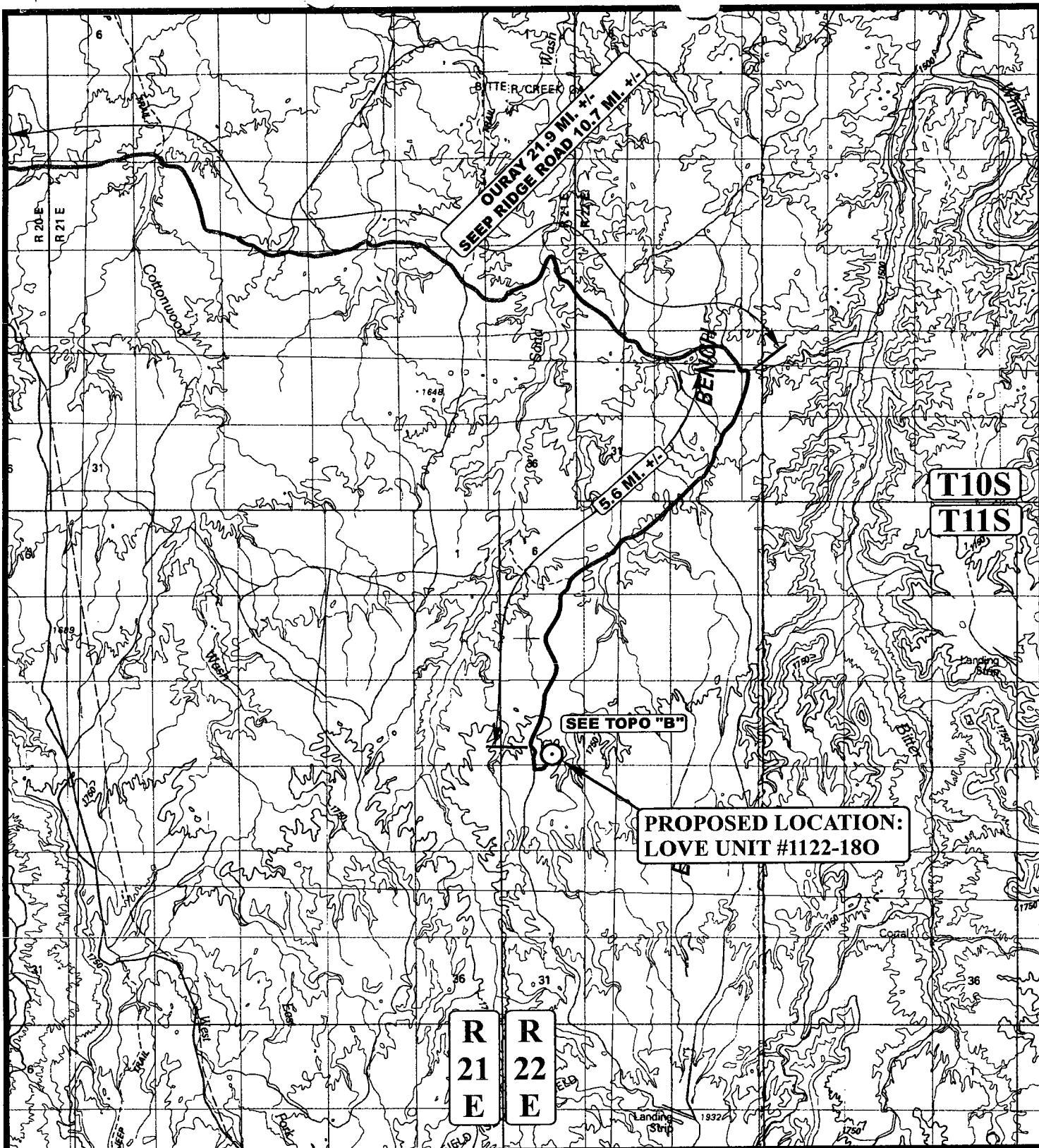
05 10 07  
MONTH DAY YEAR

PHOTO

TAKEN BY: L.K.

DRAWN BY: C.P.

REVISED: 00-00-00



# LEGEND:

○ PROPOSED LOCATION



Kerr-McGee Oil & Gas Onshore LP

LOVE UNIT #1122-180

SECTION 18, T11S, R22E, S.L.B.&M.

660' FSL 1980' FEL



Utah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

TOPOGRAPHIC  
MAP

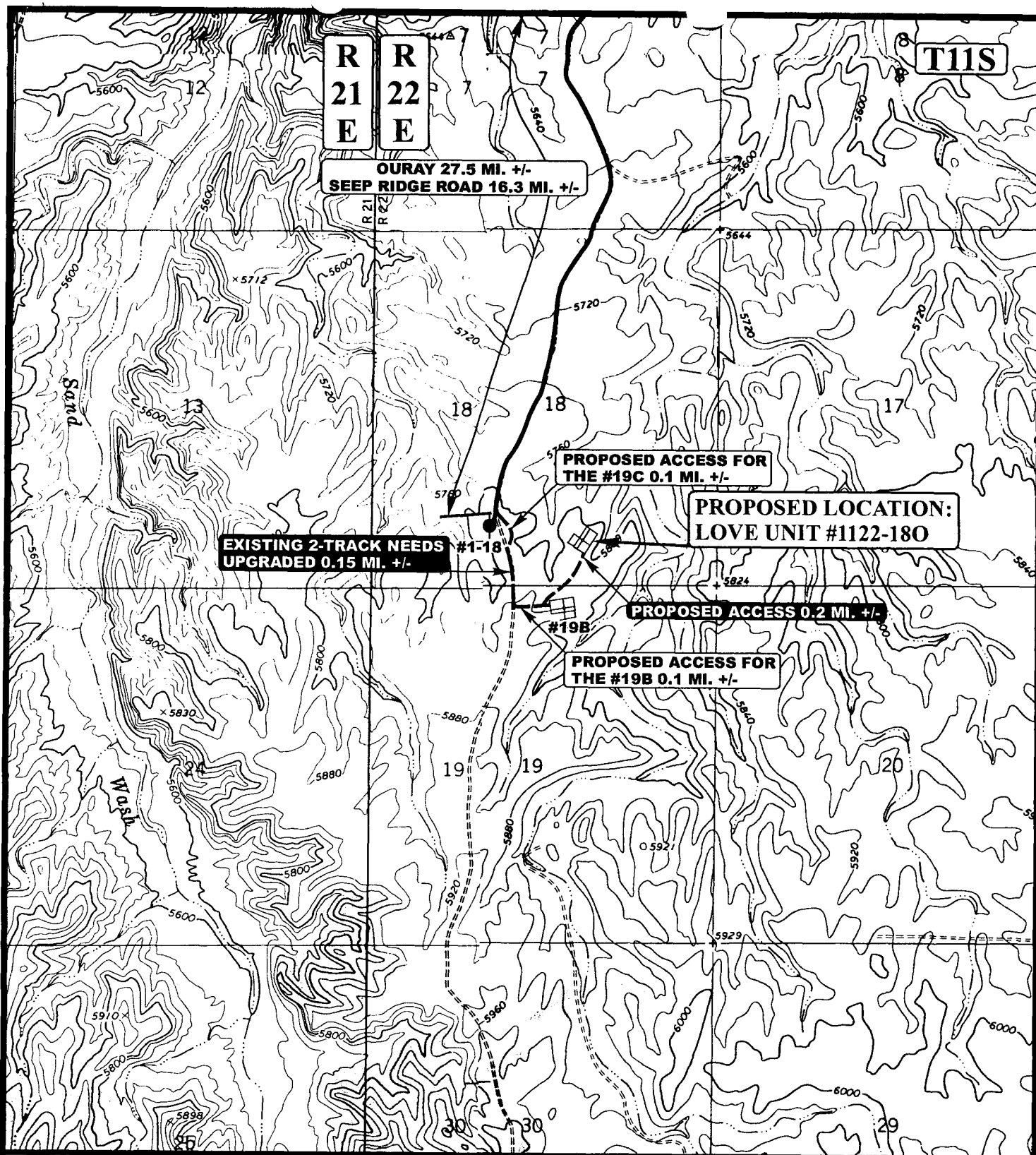
05 10 07  
MONTH DAY YEAR

SCALE: 1:100,000

DRAWN BY: C.P.

REVISED: 00-00-00





# LEGEND:

	EXISTING ROAD
	PROPOSED ACCESS ROAD
	EXISTING 2-TRACK NEEDS UPGRADED

Kerr-McGee Oil & Gas Onshore LP

LOVE UNIT #1122-180  
SECTION 18, T11S, R22E, S.L.B.&M.  
660' FSL 1980' FEL



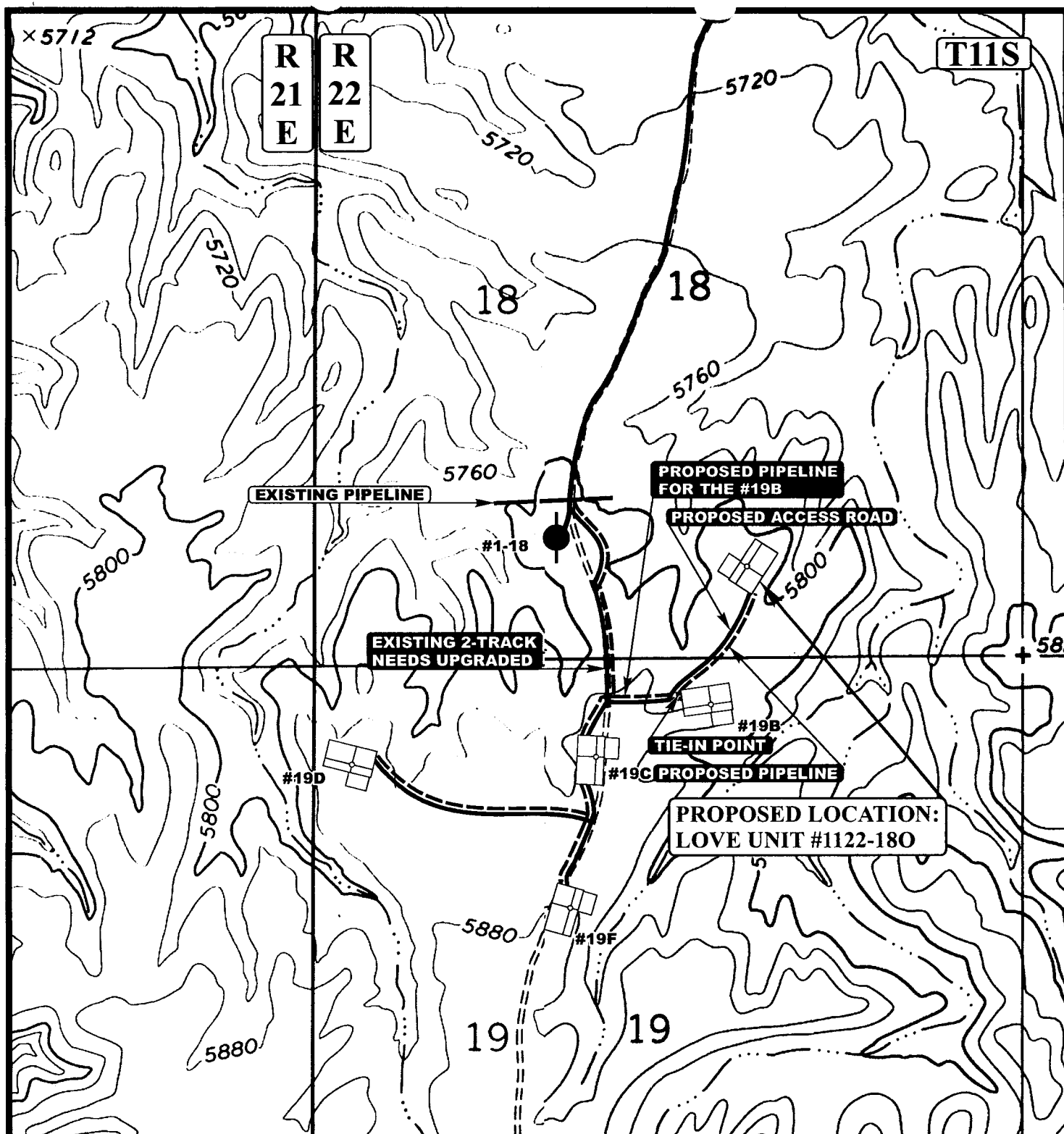
Utah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



TOPOGRAPHIC	05	10	07
MAP	MONTH	DAY	YEAR
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 00-00-00	

**B**  
TOPO





APPROXIMATE TOTAL PIPELINE DISTANCE = 892' +/-

# **LEGEND:**

	PROPOSED ACCESS ROAD
	EXISTING 2-TRACK NEEDS UPGRADED
	EXISTING PIPELINE
	PROPOSED PIPELINE
	PROPOSED PIPELINE (SERVICING OTHER WELLS)



**Kerr-McGee Oil & Gas Onshore LP**

**LOVE UNIT #1122-180**  
**SECTION 18, T11S, R22E, S.L.B.&M.**  
**660' FSL 1980' FEL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

<b>TOPOGRAPHIC</b>			<b>05</b>	<b>10</b>	<b>07</b>
<b>MAP</b>			MONTH	DAY	YEAR
SCALE: 1" = 1000'		DRAWN BY: C.P.		REVISED: 00-00-00	

**D**  
**TOPO**

# Kerr-McGee Oil & Gas Onshore LP

LOVE UNIT #1122-180

PIPELINE ALIGNMENT

LOCATED IN UTAH COUNTY, UTAH

SECTION 18, T11S, R22E, S.L.B.&M.



PHOTO: VIEW FROM TIE-IN POINT

CAMERA ANGLE: NORTHEASTERLY

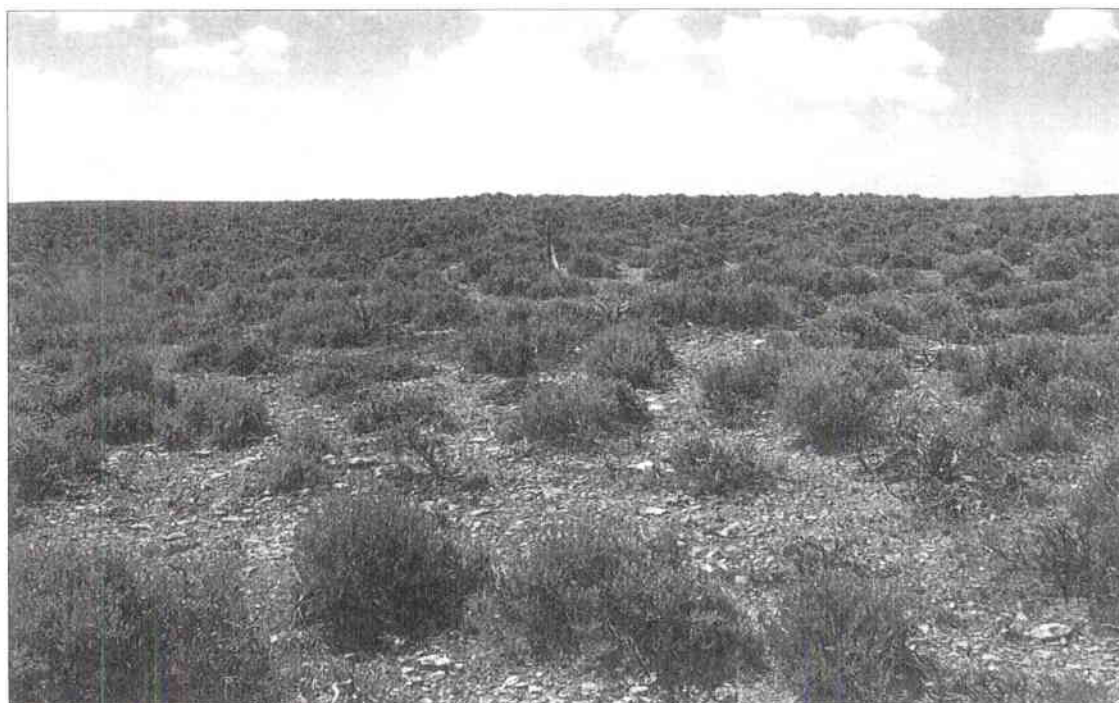


PHOTO: VIEW OF PIPELINE ALIGNMENT

CAMERA ANGLE: SOUTHWESTERLY



- Since 1964 -

UELS

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

PIPELINE PHOTOS

05 10 07  
MONTH DAY YEAR

PHOTO

TAKEN BY: L.K.

DRAWN BY: C.P.

REVISED: 00-00-00

# Kerr-McGee Oil & Gas Onshore LP

FIGURE #1

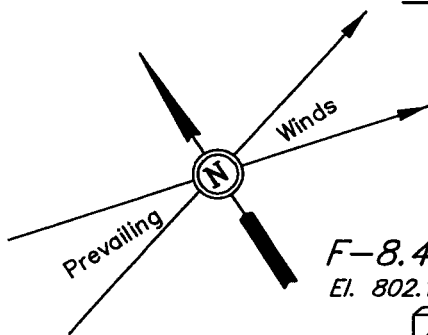
## LOCATION LAYOUT FOR

LOVE UNIT #1122-180

SECTION 18, T11S, R22E, S.L.B.&M.

660' FSL 1980' FEL

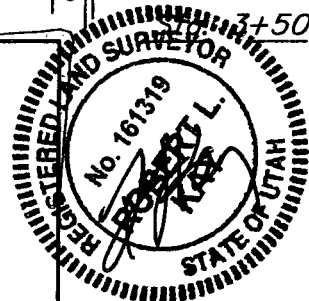
Approx.  
Toe of  
Fill Slope



F-8.4'  
El. 802.1'

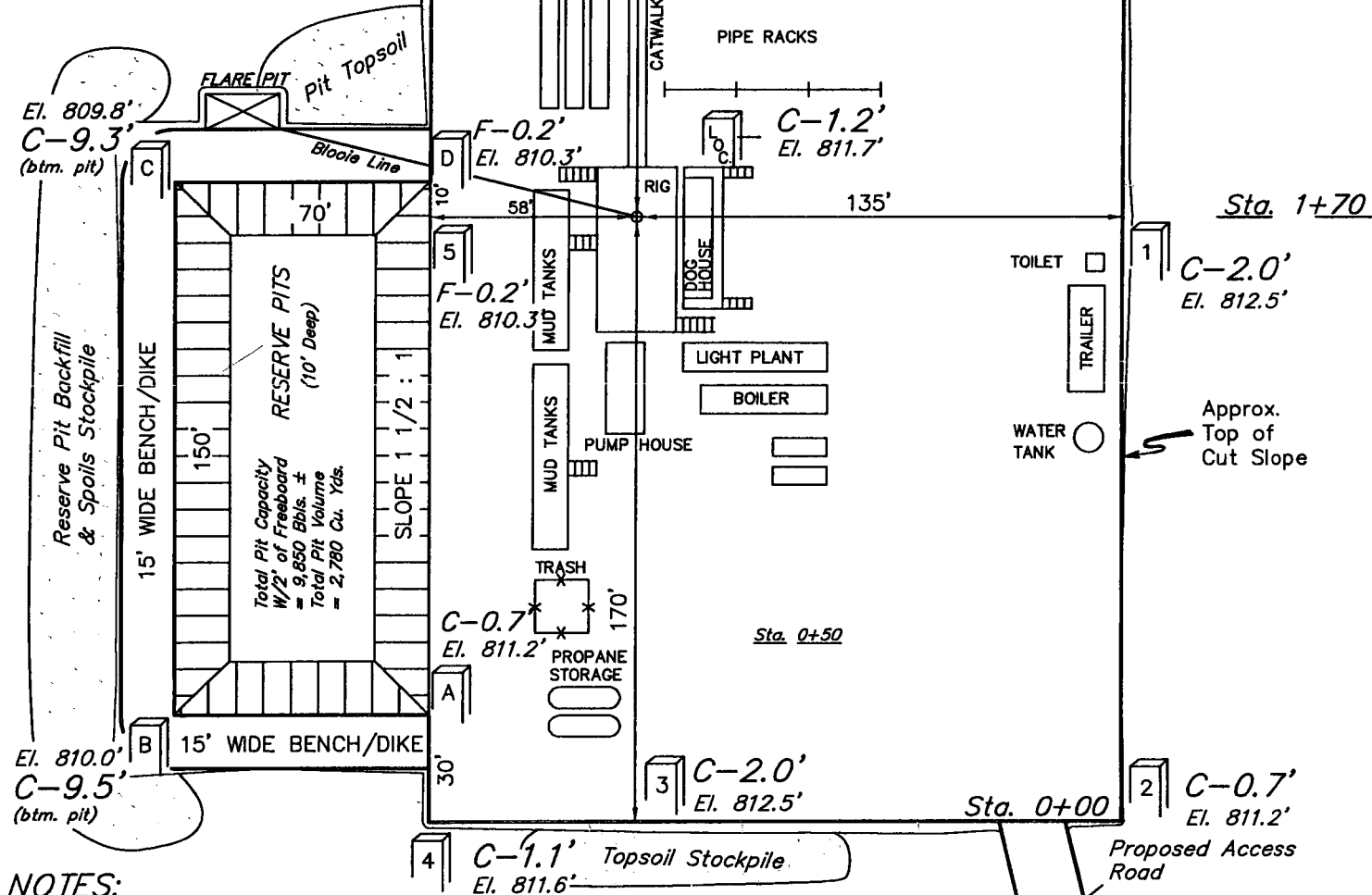
F-1.8'  
El. 808.7'

SCALE: 1" = 50'  
DATE: 05-11-07  
Drawn By: C.H.



### NOTE:

Flare Pit is to be located  
a min. of 100' from the  
Well Head.



### NOTES:

Elev. Ungraded Ground At Loc. Stake = 5811.7'  
FINISHED GRADE ELEV. AT LOC. STAKE = 5810.5'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

# Kerr-McGee Oil & Gas Onshore LP

FIGURE #2

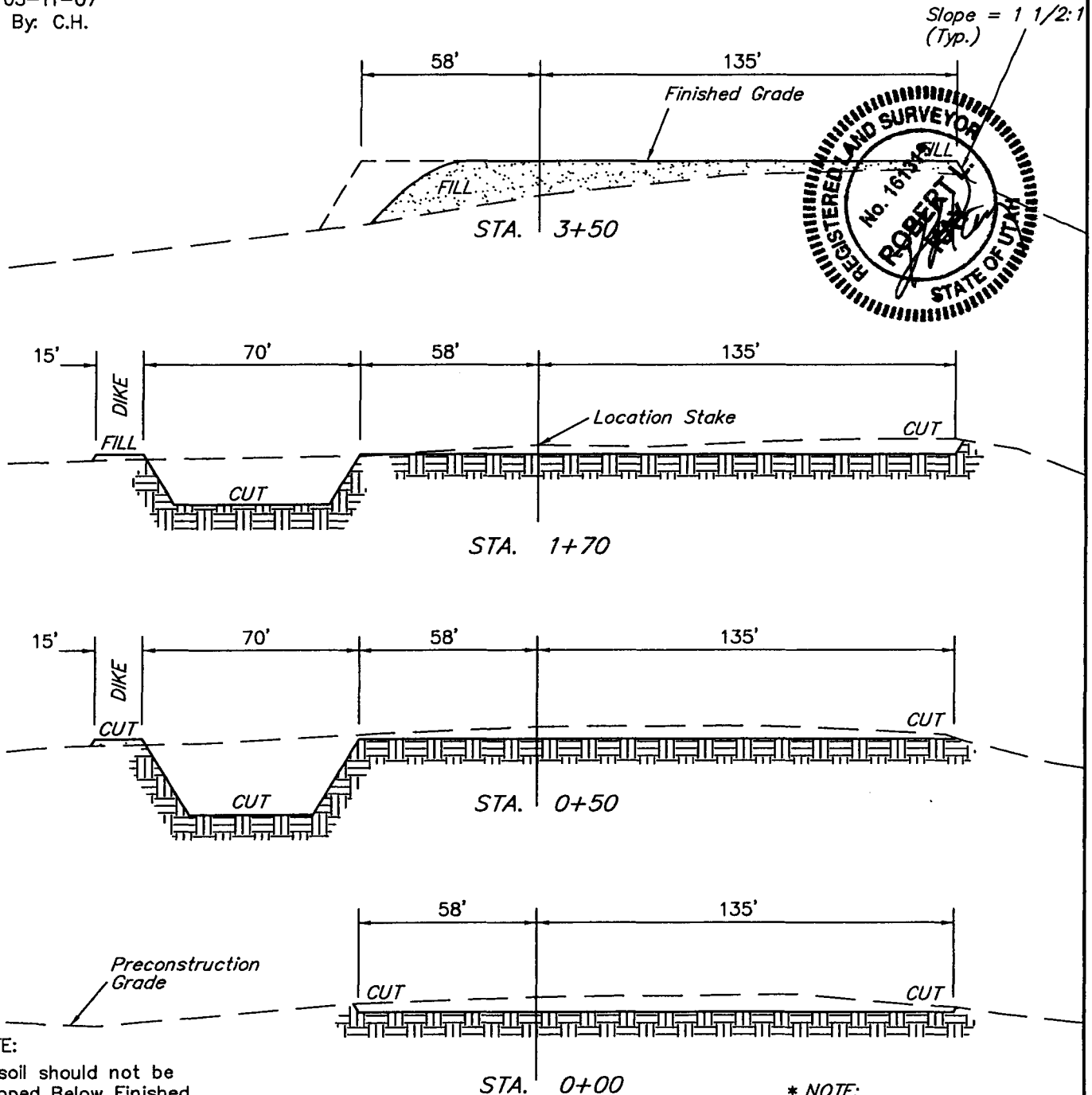
## TYPICAL CROSS SECTIONS FOR

LOVE UNIT #1122-180

SECTION 18, T11S, R22E, S.L.B.&M.

660' FSL 1980' FEL

1" = 20'  
X-Section  
Scale  
1" = 50'  
DATE: 05-11-07  
Drawn By: C.H.



### NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

### \* NOTE:

FILL QUANTITY INCLUDES 5% FOR COMPACTION

### APPROXIMATE YARDAGES

CUT  
(6") Topsoil Stripping = 1,630 Cu. Yds.  
Remaining Location = 3,760 Cu. Yds.  
  
TOTAL CUT = 5,390 CU.YDS.  
FILL = 2,370 CU.YDS.

EXCESS MATERIAL = 3,020 Cu. Yds.  
Topsoil & Pit Backfill = 3,020 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 09/04/2007

API NO. ASSIGNED: 43-047-39606

WELL NAME: LOVE U 1122-180

OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )

PHONE NUMBER: 435-781-7024

CONTACT: REBECCA WORTHEN

PROPOSED LOCATION:

SWSE 18 110S 220E

SURFACE: 0660 FSL 1980 FEL

BOTTOM: 0660 FSL 1980 FEL

COUNTY: UINTAH

LATITUDE: 39.85521 LONGITUDE: -109.4947

UTM SURF EASTINGS: 628771 NORTHINGS: 4412562

FIELD NAME: LOVE ( 622 )

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-8348

PROPOSED FORMATION: WSMVD

SURFACE OWNER: 1 - Federal

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

☒ Plat

☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. WYB000291 )

☒ Potash (Y/N)

☒ Oil Shale 190-5 (B) or 190-3 or 190-13

☒ Water Permit  
(No. 43-8496 )

☒ RDCC Review (Y/N)  
(Date: )

☒ Fee Surf Agreement (Y/N)

☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

\_\_\_ R649-2-3.

Unit: LOVE

☒ R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells

\_\_\_ R649-3-3. Exception

\_\_\_ Drilling Unit

Board Cause No: \_\_\_\_\_

Eff Date: \_\_\_\_\_

Siting: \_\_\_\_\_

\_\_\_ R649-3-11. Directional Drill

COMMENTS: \_\_\_\_\_

STIPULATIONS: \_\_\_\_\_

1- Lease Approval  
2- Spacing Slip

T11S R21E T11S R22E

# LOVE UNIT LOVE FIELD

LOVE U  
1122-18C

LOVE U  
1122-18F

LOVE U  
1122-18L

LOVE U  
1122-18K

LOVE UNIT  
A1-18

LOVE U  
1122-18N

LOVE U  
1122-18O

LOVE U  
1122-19B

LOVE U  
1122-19C

LOVE U  
1122-19F

18 LOVE U  
1122-18J

LOVE UNIT  
1122-18G

EAST BENCH  
11-22-21-17

E BENCH  
11-22-12-17

17

20

24

OPERATOR: KERR MCGEE O&G (N2995)

SEC: 18 T.11S R. 22E

FIELD: LOVE (622)

COUNTY: UINTAH

SPACING: R649-3-2 / GENERAL SITING

**Field Status**  
 ABANDONED  
 ACTIVE  
 COMBINED  
 INACTIVE  
 PROPOSED  
 STORAGE  
 TERMINATED

**Unit Status**  
 EXPLORATORY  
 GAS STORAGE  
 NF PP OIL  
 NF SECONDARY  
 PENDING  
 PI OIL  
 PP GAS  
 PP GEOTHERML  
 PP OIL  
 SECONDARY  
 TERMINATED

**Wells Status**  
 GAS INJECTION  
 GAS STORAGE  
 LOCATION ABANDONED  
 NEW LOCATION  
 PLUGGED & ABANDONED  
 PRODUCING GAS  
 PRODUCING OIL  
 SHUT-IN GAS  
 SHUT-IN OIL  
 TEMP. ABANDONED  
 TEST WELL  
 WATER INJECTION  
 WATER SUPPLY  
 WATER DISPOSAL  
 DRILLING



OIL, GAS & MINING



PREPARED BY: DIANA MASON  
DATE: 7-SEPTEMBER-2007

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

September 7, 2007

### Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2007 Plan of Development Love Unit Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2007 within the Love Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
-------	-----------	----------

(Proposed PZ Wasatch/MesaVerde)

43-047-39604	Love U 1122-18N Sec 18 T11S R22E 0827 FSL 1782 FWL	
43-047-39605	Love U 1122-18L Sec 18 T11S R22E 2606 FSL 0999 FWL	
43-047-39606	Love U 1122-18O Sec 18 T11S R22E 0660 FSL 1980 FEL	
43-047-39601	Love U 1122-19B Sec 19 T11S R22E 0332 FNL 2236 FEL	
43-047-39602	Love U 1122-19F Sec 19 T11S R22E 1790 FNL 1836 FWL	
43-047-39603	Love U 1122-19C Sec 19 T11S R22E 0701 FNL 2014 FWL	

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File – Love Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:9-7-07



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil Gas and Mining

JOHN R. BAZA  
Division Director

September 11, 2007

Kerr-McGee Oil & Gas Onshore LP  
1368 S 1200 E  
Vernal, UT 84078

Re: Love Unit 1122-18O Well, 660' FSL, 1980' FEL, SW SE, Sec. 18, T. 11 South,  
R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39606.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal Office



**Operator:** Kerr-McGee Oil & Gas Onshore LP  
**Well Name & Number** Love Unit 1122-18O  
**API Number:** 43-047-39606  
**Lease:** UTU-8348

**Location:** SW SE                      **Sec.** 18              **T.** 11 South                      **R.** 22 East

### **Conditions of Approval**

**1. General**

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**2. Notification Requirements**

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281 office      (801) 733-0983 home

**3. Reporting Requirements**

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

**4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.**

**5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.**



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Vernal Field Office  
170 South 500 East  
Vernal, UT 84078  
(435) 781-4400 Fax: (435) 781-4410



IN REPLY REFER TO:

3160

UT08300

February 25, 2008

Raleen White  
Kerr McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078

4304739606

Re: Well No. Love Unit 1122-180  
SWSE, Sec. 18, T11S, R22E  
Uintah County, Utah  
Lease No. UTU-8348  
Love Unit

Dear Ms. White:

The Application for Permit to Drill (APD) the above referenced well submitted August 21, 2007, is being returned unapproved per your request to this office in an email message to Natural Resource Specialist Verlyn Pindell on February 13, 2008. If you intend to drill at this location at a future date, a new APD must be submitted.

If you have any questions regarding this matter, please contact me at (435) 781-4455.

Sincerely,

*Cindy Severson*

Cindy Severson  
Land Law Examiner

Enclosures

cc: UDOGM – Diana Mason

RECEIVED

MAR 10 2008

DIV. OF OIL, GAS & MINING



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil Gas and Mining

JOHN R. BAZA  
Division Director

March 11, 2008

Raleen White  
Kerr McGee O&G Onshore LP  
1368 South 1200 East  
Vernal UT 84078

Love Unit 1122-180  
11S 22E 18  
43 047 39606

Re: APDs Rescinded at the request of Kerr-McGee O&G Onshore LP


Dear Ms. White:

Enclosed find the list of APDs that you requested to be rescinded to Kerr-McGee O&G Onshore LP. No drilling activity at these locations has been reported to the division. Therefore, approval to drill these wells is hereby rescinded, effective March 10, 2008.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject locations.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

  
Diana Mason  
Environmental Scientist

cc: Well File  
Bureau of Land Management, Vernal

Federal 920-35M  
Federal 1021-34L  
Federal 1021-34O  
Federal 1021-23I  
Federal 1021-23H  
NBU 1021-3I  
NBU 1021-6E  
NBU 1021-5MT  
NBU 1021-12M  
NBU 1021-12K  
NBU 1021-11J  
NBU 1021-11N  
NBU 1021-11O  
NBU 1021-14B  
NBU 1021-14F  
NBU 1021-15J  
NBU 1021-15K  
NBU 1021-15O  
NBU 1021-23C  
NBU 1021-23D  
NBU 1021-23E  
NBU 1021-23B  
NBU 1021-23J  
NBU 1021-23K  
NBU 1021-23N  
NBU 1021-23M  
NBU 1021-22E  
NBU 1021-22C  
NBU 1021-22L  
NBU 1021-22K  
NBU 1021-22D  
LOVE UNIT 1122-18F  
LOVE UNIT 1122-18O  
LOVE UNIT 1122-18N  
LOVE UNIT 1122-19F  
LOVE UNIT 1122-15J  
LOVE 1121-2B  
LOVE 1121-7J  
LOVE 1121-14J  
LOVE 1121-14L  
LOVE 1121-15J